

## Responses to Comments on the HRA, Volume II Hunters Point Shipyard

1) Responses to Attachment 1 Comments. EPA is satisfied with all Navy responses to EPA comments as provided in Attachment 1 of our March 29, 2002 letter with one exception. Please provide additional detail on the release documentation" referenced in response to Attachment 1 Comment 4.

2) Responses to Attachment 2 Comments. Steve Dean has the following comments on the Navy's responses:

- **HRA bldg Comment 9; Section 9.0, page 9-1:** Actually TMA/Eberline Services, Inc. of Albuquerque, NM. performed a gridded walkover survey of IR02 using 2"x2" NaI detectors during late 1991 and early 1992. While PRC was the Navy's CLEAN contractor at that time it subcontracted the actual radiation survey work to TMA/Eberline. Refer to PRC's **Surface Confirmation Radiation Survey Preliminary Draft Report Appendix A** dated June 12, 1992. Much of Appendix A is a compilation of Eberline's IR02 survey data reported on its own company letterhead.
- **APP E, Bldg 130, Comment 2:** I have an insitu gamma spectrum of sampling point #25 that confirms my conclusion that the gravel in Building 130 has very slightly elevated Thorium 232 as evidenced by its Thallium 208 (a Th232 daughter) peak present at 2615 kev. The Bismuth 214 (a Radium 226 daughter) peak at 1764 kev is not present in this same spectrum. EPA will provide a copy of this spectrum to the Navy for review. The EPA scanner van also identified a slight gamma anomaly in Building 130 as Thorium 232 and its daughters. That scanner van spectrum is also available.
- Both Th232 and Ra226 in this instance are naturally occurring radioactive materials (NORM) and should not be considered radioactive contamination. Whether the gravel in Building 130 has Th232 (Ra228) or Ra226 is largely a moot point. Yet, it behooves the Navy to maintain the highest degree of technical accuracy reasonably achievable during site characterization of potential radiation sites. Also, misidentifying a NORM source could complicate or delay release of this building for future unrestricted use because it is my understanding that the CaDHS release criteria for Th232 and Ra226 are not identical.
- **App E Work Plan Comment:** It is my understanding that when the Navy applies NUREG Guide 1.86 to clear building interiors for unrestricted reuse the residual annual radiation dose falls well below the CaDHS release limit of 25 millirem per year and even below EPA's release guideline of 15 millirem per year. Since the Navy already employs a confirmation strategy that surpasses the requirements of both CaDHS and EPA (even though EPA's guideline has never been promulgated) it should acknowledge that accomplishment in its final closeout reports for buildings at HPNS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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May 19, 2003

Mr. Keith Forman  
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San Diego, CA 92101-8571

RE: Navy Responses to EPA Comments on the Draft Historical Radiological Assessment,  
Volume II, Hunters Point Shipyard, March 7, 2003

Dear Mr. Forman:

The United States Environmental Protection Agency (EPA), has completed its review of the above referenced document. Our comments are presented in an attachment to this letter.

Should you have any questions regarding the attached comments, please contact me at (415) 972-3013.

Sincerely,

A handwritten signature in black ink, which appears to read "Claire", followed by a long horizontal flourish.

Claire Trombadore  
Remedial Project Manager

cc: Dave DeMars, Navy  
Doug Bielskis, TtEMI  
Chein Kao, DTSC  
Julie Menack, RWQCB  
Amy Brownell, City of SF  
Michael Work, EPA ✓  
Steve Dean, EPA  
Deirdre Dement, DHS